

filed application provides proper antecedent basis for the claim terms to one of ordinary skill in the art. The section of the application entitled "Summary of the Invention" on page 2 recites the specific claim language for which the Office Action asserts that antecedent basis is lacking. For these reasons, Applicants respectfully assert that the objections to the specification should be withdrawn. Further, the specification shows exemplary embodiments of the claimed invention. For example, first projections including protrusion features are discussed on page 5, lines 6 - 9. Specifically, the projections 12 include ends 124. Examples of grooves including cavity features are discussed on page 5, lines 13 - 22. Specifically, the grooves 32 include apertures 36. For these reasons, Applicants respectfully assert that one of ordinary skill in the art would understand that the invention as claimed conforms to the originally filed specification, and therefore respectfully assert that the specification provides clear support and proper antecedent basis for the claim terms. Thus, Applicants respectfully request that the objections to the specification be withdrawn.

Claims 1 - 10 were rejected under 35 U.S.C. § 112, second paragraph. Applicants respectfully traverse the rejection, and respectfully assert that when the claims are read as a whole, the claim terms have a clear meaning that is definite to one of ordinary skill in the art, and therefore the rejection of the claims should be withdrawn. For further understanding of the claims, the originally filed specification provides descriptions of exemplary embodiments of the invention. For example, lines 6 - 9 of page 5 and lines 12 - 18 of page 2 discuss the first projections that include protrusion features. Lines 13 - 33 of page 5 and lines 18 - 23 of page 2 discuss the grooves that include cavity features. For these reasons, Applicants respectfully request that the rejection of the claims be withdrawn.

Claims 1 - 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,019,521 to *Manning et al.* in view of U.S. Patent No. 6,196,869 to *Kay et al.* Applicants respectfully traverse the rejection of the claims for the reasons discussed below.

Independent claims 1, 11, and 12 are each directed to a system for connecting male and female components. The system uses pairs of cooperating protrusions and cavities to retain and center the male component with respect to the female component.

Specifically, claim 1 recites "a pair of first projections" "being fixed to a first one of the male and female members," the pair of projections including "a first one of a cavity feature and a protrusion feature" and "a pair of grooves in a second one of the male and female members,"

“each groove including a second one of the cavity feature and the protrusion feature,” claim 11 recites “a pair of first projections,” “fixed to a first one of the male and female members,” “a pair of grooves in a second one of the male and female members,” the first projections each including “a tip”, “and an aperture extending from each groove,” and claim 12 recites “providing a first one of the male and female members with a pair of first projections” that includes “a first one of a cavity feature and a protrusion feature,” “providing a second one of the male and female members with a pair of grooves” that include “a second one of the cavity feature and the protrusion feature,” and “relatively displacing the male member with respect to the female member until the second feature cooperatively engages the first feature.” Applicants respectfully assert that the claimed invention as a whole is not taught or suggested by a combination of *Manning et al.* and *Kay et al.*

In contrast, *Manning et al.* fails to teach or suggest the use of pairs of cooperating protrusions and cavities to retain and center the male component with respect to the female component, and further *Manning et al.* cannot be modified to use pairs of cooperating features as asserted in the Office Action. Thus the claims are patentable.

In particular, *Manning et al.* show a connector disposed in a receptacle. As shown in figure 1, the connector 24 includes a protrusion 100. As shown in figure 2, the receptacle 26 includes a keyway 86 and an aperture 102. Thus, in contrast to the claimed invention, *Manning et al.* do not have a pair of protrusions on the connector 24, and do not have a pair of cavities on the receptacle 26.

The Office Action acknowledges these deficiencies in *Manning et al.*, but asserts that the protrusion 100 and the aperture 102 of *Manning et al.* can be duplicated to provide the claimed invention. However, as shown in figures 3A - 3C of *Manning et al.*, the connector 24 includes a base portion 44. As discussed in column 6, lines 22 - 29, the base portion 44 is used to align the connector 24 with the receptacle 26. The protrusion 100 of *Manning et al.* could not be duplicated without altering the function of the base portion 44. Applicants respectfully assert that since the duplication of the protrusion 100 would modify the purpose of the base portion 44 without any well founded reason, *Manning et al.* do not teach or suggest the claimed invention as a whole.

Notwithstanding the deficiencies of *Manning et al.*, the Office Action relies on *Kay et al.* in an attempt to cure the deficiencies identified in *Manning et al.* However, *Kay et al.* do not

teach or suggest a system for connecting male and female components, much less a system using pairs of cooperating protrusions and cavities to connect the components. In contrast, figure 1 of *Kay et al.* shows a mounting bracket for a power bus connector.

The Office Action relies on the use of pairs of mounting brackets in *Kay et al.* to provide alleged motivation for duplicating the protrusion 100 and aperture 102 in *Manning et al.* However, as already discussed in detail above, *Manning et al.* cannot be modified to include pairs of cooperating protrusions and cavities, since the alteration would modify the purpose of the connection of *Manning et al.* Thus, Applicants respectfully assert that the proposed combination of *Manning et al.* and *Kay et al.* is erroneous and is supported only by Applicants' disclosure. For these reasons, Applicants respectfully request that the rejections of the independent claims be withdrawn and claims 1, 11, and 12 allowed.

Claims 2 - 10, 13, and 14 dependent from independent claims 1 and 12, and are therefore also allowable for at least the same reasons as the independent claims. Thus, Applicants respectfully request that the rejection of the claims be withdrawn and the dependent claims allowed.

In view of the foregoing remarks, Applicants respectfully request reconsideration of the application and timely allowance of the pending claims.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution of the application.